REMARKS

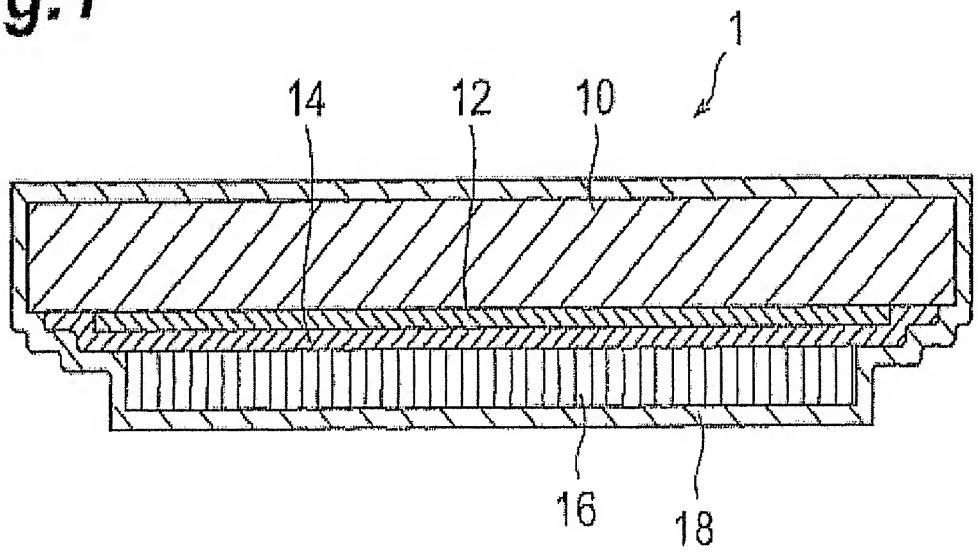
Claims 1-18 are pending. Claims 7-18 have been added. No new matter has been added.

The Office Action rejects claims 1-2 and 4-6 under 35 U.S.C. 102(b) as being anticipated by Tashiro (U.S. Patent Application No. 2002/0159563). Applicants respectfully assert that Tashiro fails to disclose or suggest the features of claims 1-2 and 4-6, which include the protective stack having a moisture resistant layer and a conversion layer, where the moisture resistant layer is positioned between the conversion layer and the planarising layer. As conceded by the Office Action, Tashiro fails to disclose or suggest a moisture resistant layer.

The Office Action rejects claim 3 under 35 U.S.C. 103 as being obvious over Tashiro in view of Homme (U.S. Patent Application No. 2006/0038131). Applicants respectfully assert that the combination of Tashiro and Homme fail to disclose or suggest the features of claim 3, which include the protective stack having a moisture resistant layer and a conversion layer, where the moisture resistant layer is positioned between the conversion layer and the planarising layer.

As described above, Tashiro does not disclose or suggest a moisture resistant layer. Homme discloses a SiN layer 18 that can be positioned above a scintillation layer 16 and wrapped about the entire element including the substrate 10:

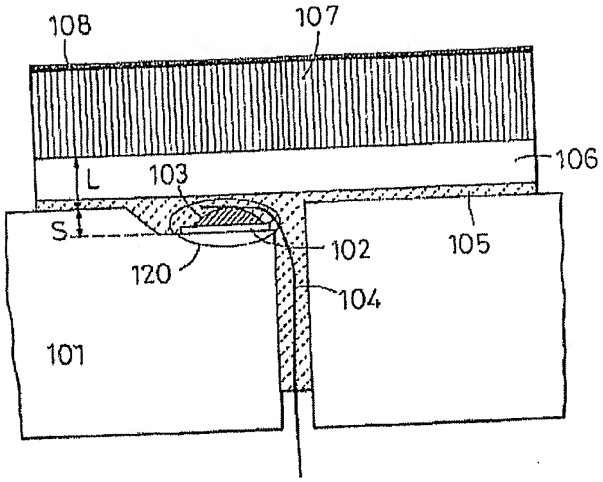
Fig.1



The positioning of the SiN layer 18 in Homme would not lead one of ordinary skill in the art to modify the Tashiro device with the feature of claim 3 of the protective stack having a moisture resistant layer and a conversion layer, where the moisture resistant layer is positioned between the conversion layer and the planarising layer.

Moreover, Tashiro teaches away from such a modification. Tashiro provides a particular structure, including a stepped substrate in which the electrode pad is positioned, which is intended to improve the transfer of light through the detector:

FIG. 5



Tashiro uses a light transmitting substrate 106 for this purpose and further describes that in the absence of such a substrate then the distance between the scintillation layer 107 and the imaging elements 101 can be further decreased to "form a structure causing less diffusion of light." (Tashiro par. 0067). As such there would be no motivation to modify the Tashiro device with the feature of claim 3.

Claims 1-2 and 4-18 also include the feature of the protective stack having a moisture resistant layer and a conversion layer, where the moisture resistant layer is positioned between the conversion layer and the planarising layer. For the reasons described above, these claims are also not anticipated nor rendered obvious by Tashiro or Homme, taken alone or in combination.

Accordingly, for at least the above-described reasons, withdrawal of the rejections is respectfully requested. Favorable consideration and early issuance of the Notice of Allowance are respectfully requested.

Respectfully submitted,

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